

Application No.: 10/824,385

Attorney Docket No.: 20402-00621-US1

REMARKS

Claims 35-43 are pending in the application. Claims 1-34 were previously canceled. Claims 35-40 were amended and claims 41-43 were added by way of the present amendment.

In the outstanding Office Action, the disclosure was objected to due to informalities; claims 36, 37, 39 and 40 were objected to due to informalities; claims 35-40 were rejected under 35 U.S.C. §112, 2nd paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention; claims 35-40 were rejected under 35 U.S.C. §103(a) as unpatentable over Perkins (U.S. Patent No. 3,568,909) in view of Fa et al. (U.S. Patent No. 5,785,228).

Specification Objections

In response to the objections to the disclosure/specification due to informalities, the specification has been amended to clarify the invention. In particular, the phrase "injection hole 41" has been amended to read as "nose 41." Support for the amendment is provided by the specifications at least at page 14, line 26. Therefore, it is respectfully submitted that the amendment raises no question of new matter.

Claim Objections

In response to the objections to the claims due to informalities, claims 36 and 37; and claims 39 and 40 have been amended to depend upon claims 35 and 38, respectively. The amendments raise no questions of new matter.

35 U.S.C. §112 Rejections

In response to the 35 U.S.C. §112, 2nd paragraph, rejection, the claims have been amended to clarify the invention. In particular, claim 35 has been amended to recite:

a seal member provided on a first surface formed on one of
said valve piston and said plunger; and

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combined grooves and ridges formed on a second surface formed on the other one of said valve piston and said plunger, said second surface opposing to said first surface (emphasis added).

That is, the phrases "first surface," and "second surface" have been added to clarify the meaning of the phrases "one of said valve piston and said plunger" and "the other one of said valve piston and said plunger," as being two different surfaces, respectively. Claim 38 has been amended with similar language.

Further, claim 35 has been amended to recite:

wherein said ridges slidably hold said seal member and at the same time said grooves cooperatively define an air passage between said valve piston and said plunger.

Claim 38 has been amended with similar language. Support for the amendments is shown at least in FIGS. 4, 7, 15 and 16 of the specification and at least disclosed in the supporting text for the figures. Therefore, it is respectfully submitted that the amendments raise no question of new matter and that the claims are definite.

35 U.S.C. §103 Rejections

Claims 35 to 40 were rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins in view of Fa et al. Applicants respectfully traverse the rejection.

Perkins discloses a fastener driving machine with a cylinder and a moveable piston.¹ In particular, Perkins discloses a fastener driving machine 11 that includes an outer casing 12 containing a cylinder 13 that further contains a piston 14 that is reciprocatingly movable.² In addition, Perkins discloses that piston 14 is sealed within the cylinder 13 by means of O-rings 37 and that a pressure air chamber 39 is provided within outer casing 12.³

However, Perkins nowhere discloses the "trigger valve portion," as recited in claims 35 and 38 that further comprises:

¹ Perkins at ABSTRAC.

² *Id.* at column 1, line 71; to column 2, line 5.

³ *Id.* at column 2, lines 27-37.

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a valve piston having a surface allowing a slide movement relative to slidably supporting said plunger and shifting in a direction opposed to a shifting direction of said plunger; and
a valve bush having a surface slidably supporting said plunger and said valve piston so as to allow slide movements of said plunger and said valve piston, and
a seal member provided on one of said valve piston and said plunger; and
combined grooves and ridges formed on the other one of said valve piston and said plunger.

Thus, it is respectfully submitted that Perkins alone clearly does not disclose the claimed invention. In fact, the outstanding Office Action acknowledges the deficiencies of Perkins and attempts to overcome those deficiencies with Fa et al. However, Fa et al. can not overcome the deficiencies of Perkins, as will be discussed below.

Fa et al. discloses a dual mode pneumatically driven fastener driving tool that utilizes a resettable valve trigger apparatus, a work contact element and a mode selecting trigger blocking pin.⁴ In particular, Fa et al. discloses a pneumatic tool 1 equipped with a trigger valve apparatus 9 which includes an extensible stem or core 18, a reciprocating shuttle 34, an upper valve body 30, a lower valve body 31, and O-ring seals 51-53, 56, 57 that are located in grooves on the reciprocating shuttle 34.

However, Fa et al. nowhere discloses, as recited in claim 35:

a seal member provided on a first surface formed on one of said valve piston and said plunger; and
combined grooves and ridges formed on a second surface formed on the other one of said valve piston and said plunger, *said second surface opposing to said first surface,*
wherein said *ridges slidably hold said seal member and at the same time said grooves cooperatively define an air passage* between said valve piston and said plunger (emphasis added).

In particular, the “grooves and ridges” of the claimed invention are formed on a “second surface opposing to the first surface,” as recited in claim 35. Claim 38 recites similar language.

Fa et al. discloses O-rings 57 and 51 that effectively seal the area of relief passage of compression air.⁵ However, in contrast to the claimed invention and as shown in FIGs. 11 and

⁴ Fa et al. at ABSTRACT.

⁵ Id. at FIG. 10 and FIG. 12.

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13, Fa et al., does not disclose 'ridges slidably hold said seal member and *at the same time* said grooves cooperatively define an air passage between said valve piston and said plunger' (emphasis added). That is, Fa et al. nowhere discloses ridges that cooperatively hold the side surface of the O-ring 52 and *at the same time* has grooves that cooperatively define an air passage, as recited in the claimed invention. Thus, for this reason and the reasons discussed above, Fa et al. cannot overcome the deficiencies of Perkins.

Therefore, it is respectfully submitted that neither Perkins nor Fa et al., whether taken individually or in combination, does not disclose, suggest or make obvious the claimed invention and that claims 35, 38 and claim dependent thereon, patentably distinguish thereover.

New claims 41-43 have been added by way of the present amendment. Claims 41-43 are at least supported by the language of claims 35-40. Therefore, it is respectfully submitted that claims 41-43 raise no questions of new matter and, at least for the reasons discussed above, patentably distinguish over the applied art of Perkins and Fa et al.

Conclusions

In view of the above, reconsideration and allowance are, therefore, respectfully solicited.

In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below.

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Applicant believes no fees are due with this request. However, the Director is hereby authorized to charge any fees, or credit any overpayment, associated with this communication, including any extension fees, to Deposit Account No. 22-0185.

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Respectfully submitted,

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